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THESIS

**COMMUNITY PREPAREDNESS: ALTERNATIVE
APPROACHES TO CITIZEN ENGAGEMENT
IN HOMELAND SECURITY**

by

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June 2014

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**COMMUNITY PREPAREDNESS: ALTERNATIVE APPROACHES
TO CITIZEN ENGAGEMENT IN HOMELAND SECURITY**

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ABSTRACT

Since the events of September 11, 2001, there has been an increased emphasis on citizen preparedness in the United States. But over 12 years later, the overall level of preparedness for individuals remains basically unchanged. Americans remain largely unprepared to take care of themselves and their families following a disaster or a terrorist event. There is evidence of success in citizen engagement and community outreach in other safety campaigns, such as fire prevention and safety, as well as seat belt safety. This thesis asks what strategies, methods and practices are used in these successful models to effectively change individual behavior and prompt citizens to take action, and how can these models be applied successfully in the homeland security mission space in the area of community preparedness. In addition, this thesis examines a small set of best practices (fire prevention and safety and seat belt safety) and a comparative case study of community preparedness in the United Kingdom. These best practices are then applied to the United States homeland security discipline, specifically in the area of individual, family and community preparedness. Finally, this thesis provides recommendations for practical applications to increase citizen engagement in preparedness in the United States.

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TABLE OF CONTENTS

I.	THE LANDSCAPE OF INDIVIDUAL, FAMILY AND COMMUNITY PREPAREDNESS.....	1
A.	PROBLEM STATEMENT	1
B.	RESEARCH QUESTION	6
C.	SIGNIFICANCE OF THE RESEARCH.....	6
D.	LITERATURE REVIEW	6
	1. Current Model and Messaging	6
	2. Behavioral Change.....	13
	3. Trusted Messengers	16
	4. Financial Resources and Investments	18
	5. Literature Review Conclusion	20
E.	HYPOTHESES AND TENTATIVE SOLUTIONS.....	22
F.	METHOD	23
G.	OVERVIEW OF CHAPTERS.....	26
II.	FIRE PREVENTION AND FIRE SAFETY	27
A.	BACKGROUND / HISTORY.....	27
B.	THEORIES / PRINCIPLES	28
C.	METRICS / IMPACTS	29
D.	DISCUSSION	30
III.	SEAT BELT SAFETY.....	31
A.	BACKGROUND / HISTORY.....	31
B.	THEORIES / PRINCIPLES	32
C.	METRICS / IMPACTS	33
D.	DISCUSSION	34
IV.	CASE STUDY AND COMPARATIVE ANALYSIS: INDIVIDUAL AND COMMUNITY PREPAREDNESS IN THE UNITED KINGDOM	37
A.	BACKGROUND / HISTORY.....	37
B.	THEORIES / PRINCIPLES	38
C.	DISCUSSION	40
V.	RECOMMENDATIONS AND CONCLUSIONS.....	43
A.	RECOMMENDATIONS.....	43
	1. Defining Preparedness.....	43
	2. Increased Emphasis on Psychological Requirement for Behavioral Change.....	44
	3. Messages and Messengers	45
	4. Community-Based Implementation	48
B.	CONCLUSIONS	54
	LIST OF REFERENCES	57
	INITIAL DISTRIBUTION LIST	61

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LIST OF ACRONYMS AND ABBREVIATIONS

AI	appreciative inquiry
CCP	Citizen Corps Programs
CCS	Civil Contingencies Secretariat
CDC	Centers for Disease Control
CERT	Community Emergency Response Team
CHDS	Center for Homeland Defense and Security
CHF	Children's Health Fund
CRS	Congressional Research Service
DHS	Department of Homeland Security
DOT	Department of Transportation
EPPM	extended parallel process model
FEMA	Federal Emergency Management Agency
GAO	Government Accountability Office
MD	medical doctor
NHTSA	National Highway Traffic Safety Administration
NFPA	National Fire Protection Association
NPS	Naval Postgraduate School
NCDP	National Center for Disaster Preparedness
NOPUS	National Occupant Protection Use Survey
PDP	personal disaster preparedness
PMT	protection motivational theory
PPD-8	Presidential Policy Directive-8
QHSR	Quadrennial Homeland Security Review
TCL	Target Capability List
TTM	transtheoretical model
UK	United Kingdom
US	United States
ZTPI	Zimbardo time perspective inventory

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I. THE LANDSCAPE OF INDIVIDUAL, FAMILY AND COMMUNITY PREPAREDNESS

A. PROBLEM STATEMENT

Since the events of September 11, 2001, there has been an increased emphasis on citizen preparedness in the United States. Starting with the first *National Strategy for Homeland Security* (2002), which discussed the creation and planned expansion of Citizen Corps, this and subsequent homeland security strategic documents, such as the *Presidential Policy Directive 8* (National Preparedness), the 2010 *Quadrennial Homeland Security Review* (DHS), the 2011 *National Preparedness Goal* (DHS), and the 2012–2016 *DHS Strategic Plan*, recognize that individual preparedness and engaging with members of the community is vital to enhancing the resiliency and security of our nation.¹

But over 12 years later, the overall level of individual preparedness remains basically unchanged. Even after Hurricane Katrina and Rita in 2005, the majority of Americans remain unprepared to take care of themselves and their families following a disaster or a terrorist event. The Federal Emergency Management Agency's (FEMA) 2012 *National Household Survey* reported that over the past five years, levels of preparedness behaviors have fluctuated without showing a clear upward trend.² In fact, 54 percent of the respondents surveyed did not believe a disaster would ever occur in their community.³ “The American public has been left out and is largely missing in action”⁴ since 2001 when it comes to preparedness, according to Robert Bach and David Kaufman. They argue that at the individual citizen level, the general public is not fully engaged in homeland security.

¹ U.S. Department of Homeland Security, *Strategic Plan Fiscal Years 2012–2016* (Washington, DC: U.S. Department of Homeland Security, 2012), 16.

² Federal Emergency Management Agency, *Personal Preparedness in America: Findings from the 2012 FEMA National Survey* (Washington, DC: U.S. Department of Homeland Security, 2013), 1.

³ *Ibid.*, 14.

⁴ Robert Bach and David Kaufman, “A Social Infrastructure for Hometown Security: Advancing the Homeland Security Paradigm, *Homeland Security Affairs* V, no 2 (2009), <http://www.hsaj.org/?fullarticle=5.2.2>.

In the context of homeland security, what do the terms “prepare” and “engage” mean? Merriam Webster’s Collegiate Dictionary defines “engage” as “committed to or supportive of a cause.”⁵ The word “prepare” is defined as “to make ready beforehand for some purpose.”⁶

The *Quadrennial Homeland Security Review Report (QHSR): A Strategic Framework for a Secure Homeland* (2010) provides an example of how these terms are explained in the homeland security mission space. The QHSR includes a goal to “Enhance Preparedness” and defined that goal as follows: “Engage all levels of society in improving preparedness.”⁷ The first objective of that goal states:

Improve individual, family and community preparedness: Ensure individual, family, and community planning, readiness, and capacity building for disasters. Prepared individuals and families enhance overall community resilience and reduce the burden on government emergency responders. Individuals and families must be prepared to care for themselves for a reasonable period of time after a disaster – some experts have suggested the first 72 hours—and assist their neighbors, reserving scarce public resources to assist those who are injured, incapacitated, or otherwise unable to care for themselves. The public must be engaged in order to build a collective understanding of their risks, the resources available to assist their preparations, and roles and responsibilities in the event of a disaster.⁸

The 2007 *National Strategy for Homeland Security* called on federal, state, tribal and local governments, faith-based and community organizations, businesses, and individuals across the country to work together to develop a national culture of preparedness and to achieve a shared vision of a secure way of life.⁹ Key to creating this culture of preparedness is individual and community engagement in homeland security

⁵ Merriam-Webster’s Collegiate Dictionary (11th ed.), s.v. “engage” (Springfield, MA: Merriam-Webster, 2003).

⁶ Merriam-Webster’s Collegiate Dictionary (11th ed.), s.v. “prepare” (Springfield, MA: Merriam-Webster, 2003).

⁷ U.S. Department of Homeland Security, *Quadrennial Homeland Security Review Report: A Strategic Framework for a Secure Homeland* (Washington, DC: U.S. Department of Homeland Security, 2010), 60.

⁸ Ibid.

⁹ Homeland Security Council, *National Strategy for Homeland Security* (Washington, DC: Homeland Security Council, 2007).

issues. It requires an aware, educated, and motivated public that is prepared to participate in the prevention of terrorism and to react with resiliency to natural and man-made events when they occur.¹⁰

Despite these numerous requests for increased individual preparedness, the data do not indicate a great deal of success. For example, 2007 survey conducted by the National Center for Disaster Preparedness (NCDP) and the Children's Health Fund (CHF) concluded that although nearly half the people in the country (47 percent) believed they would personally experience a major disaster, such as a terrorist attack or a catastrophic weather emergency within the next five years, only one third (34 percent) of Americans have started preparing for or were prepared for a major disaster. In fact, 43 percent indicated that they were not planning to do anything about preparing.¹¹ There are a number of other similar surveys in the literature; conducted at different points in time since 2001, and the majority of the data generally supports the same findings.

The Obama administration continues to make individual and community preparedness, as well as “resiliency,” a stated priority. For example, the *Quadrennial Homeland Security Review Report: A Strategic Framework for a Secure Homeland* (2010) states, “While efforts have traditionally focused on the preparedness of government and official first responders, individuals prepared to care for themselves and assist their neighbors in emergencies are important partners in community preparedness efforts.”¹² This topic of individual preparedness is also included in the 2010 *National Security Strategy of the United States* as a vital component to our linked homeland security and national security strategies. Specifically, it states, “We will emphasize individual and community preparedness and resilience through frequent engagement that provides clear and reliable risk and emergency information to the public.”¹³ The *Presidential Policy Directive-8* (PPD-8), issued in March 2011, also raises the issue of

¹⁰ Ibid., 4.

¹¹ National Center for Disaster Preparedness, *The American Preparedness Project: Where the U.S. Stands in 2007 on Terrorism, Security and Disaster Preparedness* (Columbia, NY: Columbia University Mailman School of Public Health, 2007).

¹² U.S. Department of Homeland Security, *Quadrennial Homeland Security Review Report*, 60.

¹³ White House, *National Security Strategy* (Washington, DC: White House, 2010), 19.

individual preparedness when it states, “our national preparedness is a shared responsibility of all levels of government, the private and nonprofit sectors, and individual citizens. Accordingly, it directed the Department of Homeland Security to take action:

The Secretary of Homeland Security shall coordinate a comprehensive campaign to build and sustain national preparedness, including public outreach and community-based and private-sector programs to enhance national resilience, the provision of Federal financial assistance, preparedness efforts by the Federal Government, and national research and development efforts.¹⁴

The directive defines the term “resilience” as the ability to adapt to changing conditions and withstand and rapidly recover from disruption due to emergencies.¹⁵ However, the directive stops short of providing clarity as to what this means in terms of expectations for individual citizens.

Recent studies indicate an increase in the public’s awareness of risks and familiarity with local plans, but improvements in individual preparedness and community resilience are still needed. The 2013 *National Preparedness Report* cites a 2012 FEMA national household preparedness survey that shows that nearly half of respondents reported familiarity with local hazards and about half expected to experience a natural hazard, but no substantial increase in the percentage of respondents reported having taken action (such as creating a household emergency plan or building a preparedness kit) had occurred.¹⁶

In an interview with EmergencyMgmt.com, posted in May 2013, when asked if he had seen any positive changes in terms of citizen preparedness, FEMA Administrator Craig Fugate said, “I think the general assumptions for most people is we are not really

¹⁴ U.S. Department of Homeland Security, *Presidential Policy Directive 8 / PPD-8* (Washington, DC: U.S. Department of Homeland Security, 2011), 4.

¹⁵ Ibid., 6.

¹⁶ U.S. Department of Homeland Security, *National Preparedness Report 2012* (Washington, DC: U.S. Department of Homeland Security, 2012), 31.

moving the dime there.”¹⁷ He went on to explain that he did feel there is a growing awareness that disasters are not just something that governments are supposed to respond to, but they are a shared responsibility.¹⁸ Clearly, individual and community preparedness continues to be a critical component to the nation’s national and homeland security and a stated priority at the federal government level. Individuals must be more engaged in homeland security issues for this nation to create an effective and enduring culture of preparedness and resilience.

The threat of terrorism to the United States is likely to be present for the next several years.¹⁹ The likely security challenges in the coming few years will demand much greater involvement by the public, not only to sustain public support for large scale funding, but more importantly, because the public will be crucial to greater effectiveness in preventing and responding to these threats.²⁰ Aside from the continued threat of terrorism, the United States, with its varied population and geography, will also continue to endure a range of natural hazards and disasters.

Despite repeated and sustained calls for increased citizen engagement and individual preparedness, we are not making much progress, and it does not appear we know exactly why. Homeland security practitioners need help determining what success looks like and how we achieve it. There is evidence of success in citizen engagement and community outreach in other fields, such as public health and various safety campaigns. Examples include fire prevention efforts, fire, and life safety education, seat belt safety, and public health campaigns such as immunizations and dental hygiene.

What is it about these other initiatives and programs that encourage active and sustained individual citizen and community participation and involvement? What strategies, methods, and practices are used in these successful models to effectively

¹⁷ Emergency Management, “Craig Fugate Discusses How FEMA Has Changed (And What’s Next),” May 28, 2013, <http://www.emergencymgmt.com/disaster/Craig-Fugate-FEMA-QA-2013.html>.

¹⁸ Ibid.

¹⁹ National Intelligence Council, *Global Trends 2025: A Transformed World* (Washington, DC: National Intelligence Council, 2008), ix.

²⁰ Bach and Kaufman, *A Social Infrastructure for Hometown Security*, 2.

change individual behavior and prompt citizens to take action? Why are these models not being leveraged or fully leveraged in the homeland security mission space?

B. RESEARCH QUESTION

What are effective messaging and individual engagement approaches in fields other than homeland security and how can they be applied to the homeland security mission space?

C. SIGNIFICANCE OF THE RESEARCH

This thesis adds to the literature and national discussion on individual, family, and community preparedness. It acknowledges that, since September 11, 2001, efforts to increase the level of preparedness by the general public have been less effective than desired, but it will not focus on the inadequacies of past approaches. More importantly, this thesis explores and identifies individual engagement approaches that have been effective in non-homeland security disciplines and proposes how these proven alternatives can be applied by homeland security practitioners at all levels of government and in non-governmental entities and the private sector to increase individual engagement in preparedness and resilience activities. It makes recommendations that can be included in the policy, strategic planning, and budgetary discourse on how to increase citizen preparedness in the United States.

D. LITERATURE REVIEW

The literature explored for this research falls into four general categories:

1. Current model and messaging
2. Behavioral change
3. Trusted messengers
4. Financial resources and investments.

1. Current Model and Messaging

Through FEMA, the Department of Homeland Security (DHS) has primarily promoted citizen preparedness and volunteerism by encouraging collaboration and the

creation of community-based programs in Citizen Corps, Community Emergency Response Teams (CERT), Fire Corps programs, and through the “Ready” campaign.²¹ The websites and printed literature by and about these programs provide a solid foundation for understanding current government approaches to the promotion of citizen preparedness. The Ready.gov website, as well as countless other governmental and non-governmental websites, publications, and pamphlets, present information on various disaster preparedness topics. There is an abundance of literature that provides information on threat and hazard awareness, and logical steps that individuals can take to mitigate those hazards, or at least prepare themselves and their families to be more self-sufficient and resilient when such events occur. However, this awareness information seldom leads the individual to take reasonable and appropriate action to be more prepared. Something is missing to convince them to act. Informing, educating, and asking the population to take actions to prepare have thus far not led to the desired outcomes. Directing individuals to (1) get an emergency supply kit, (2) make a family plan, and (3) be informed about different types of emergencies and the appropriate responses has not inspired people to take action to accomplish these tasks. While these sources of literature do present information that could be useful to those already inclined to take action, much of it appears to be so generalized and abstract that it will do little to inspire people to act.

The Community Preparedness and Participation capability of the Target Capability List (TCL) advocates that everyone in America is fully aware, trained, and practiced on how to prevent, protect/mitigate, prepare for, and respond to all threats and hazards.²² This requires a role for citizens in personal preparedness, exercises, ongoing volunteer programs, and surge capacity response. The desired outcome of these capabilities is a structure and a process for ongoing collaboration between government and nongovernmental resources at all levels; volunteers and nongovernmental resources are incorporated in plans and exercises; the public is educated and trained in the four

²¹ U.S. Government Accountability Office, *Emergency Management: Preliminary Observations on FEMA’s Community Preparedness Programs Related to the National Preparedness System* (GAO-10-105T) (Washington, DC: U.S. Government Accountability Office, 2009), 2.

²² U.S. Department of Homeland Security, *Target Capabilities List: A Companion to the National Preparedness Guidelines* (Washington, DC: U.S. Department of Homeland Security, 2007), 55.

mission areas of preparedness: prevention, protection, response and recovery.²³ The 37 target capabilities for the TCL were incorporated into a list of 31 core capabilities, as identified and outlined in the first edition of the *National Preparedness Goal*, issued in September 2011,²⁴ which is the latest list of desired capabilities. The community preparedness and participation capability from the TCL has now been marginalized by its inclusion in the community resilience core capability under the mitigation mission area. There is no longer a specific community preparedness capability.

FEMA Administrator W. Craig Fugate brought to FEMA a new focus, which directs that all sectors and all levels of a community must be effectively integrated, resourced, and mobilized to achieve the FEMA mission.²⁵ This focus supports a new message and desired cultural shift, or mind-set, of community-based personal and individual responsibility with regard to individual, family, and community preparedness. It redirects the preparedness focus toward enhanced personal preparedness through the community and ultimately, through each individual.²⁶

“The public’s not a liability. They’re a resource,”²⁷ said FEMA Administrator Fugate during a presentation on disaster preparedness and response in February 2011 at an event sponsored by the Center for Strategic and International Studies. He went on to say that the members of the public have to understand they have responsibilities. “They must prepare.”²⁸

²³ U.S. Department of Homeland Security, *National Preparedness Guidelines* (Washington, DC: U.S. Department of Homeland Security, 2007), iii.

²⁴ U.S. Department of Homeland Security, *National Preparedness Goal* (Washington, DC: U.S. Department of Homeland Security, 2011), 2.

²⁵ FEMA mission statement: FEMA’s mission is to support our citizens and first responders to ensure that as a nation we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards. Federal Emergency Management Agency, “About FEMA,” accessed February 20, 2013, <http://www.fema.gov/about-fema>

²⁶ U.S. Department of Homeland Security, *FEMA Strategic Plan: Fiscal Years 2011–2014* (Washington, DC: U.S. Department of Homeland Security, 2011), 10.

²⁷ Center for Strategic and International Studies, “FEMA’s Role in Disaster Response,” February 17, 2011, <http://csis.org/event/femas-role-disaster-response>.

²⁸ Ibid.

The Naval Postgraduate School Center for Homeland Defense and Security (CHDS) 2010 essay contest focused on how the United State might make homeland security a more layered, networked, and resilient endeavor involving all citizens. These essays were not submitted by academia, but by private citizens. The authors provided their perspectives from the ground level and based on their diverse backgrounds and levels of experience. The winning essay, authored by Christopher Ford, dealt with engaging citizens in the homeland security enterprise through social networking and the utilization of Web 2.0 technology such as Facebook and Twitter.²⁹ Another finalist, Mary Theresa Flynn, in her essay, “Involving Citizens in Homeland Security: Changing the National Culture of Assumed Safety,” wrote about the need to better identify risks, acknowledging that incidents will occur, and identifying appropriate responses to those incidents at the level of the individual citizen. She stated,

In order to develop the most effective way of broadly engaging citizens’ interest in homeland security, the United States should explore the most effective ways to get information to the public of when and what extent natural disasters will occur in the area where they live. Moreover, this information must be put in a context that is meaningful to them.³⁰

Using the National Flood Insurance Program’s flood hazard maps as an example, Flynn argued the need to provide risk information and appropriate responses to those specific risks to individual citizens, claiming that by having this information, citizen behavior will change. In addition, Flynn argued that a layered, networked, and resilient approach at the local community level would assist in reducing a culture of assumed safety.³¹ Conversely, this would favorably impact a culture of preparedness.

Jessica Bylsma, another 2010 finalist, in her essay titled “Unacceptable Gaps: Community Grassroots Involvement in Homeland Security,” claims that not just community outreach but grassroots community involvement must be elevated from its

²⁹ Christopher Ford, “Twitter, Facebook, and Ten Red Balloons: Social Network Problem Solving and Homeland Security,” Naval Postgraduate School, 2010, <http://www.chds.us/?essay/overview>.

³⁰ Mary Theresa Flynn, “Involving Citizens in Homeland Security: Changing the National Culture and Assumed Safety,” Naval Postgraduate School, 2010, <http://www.chds.us/?essay/overview>, 1.

³¹ Ibid.

status as the weakest link in the homeland security chain.³² She argues that government agencies at the local, state, and federal levels are ultimately responsible for leading America in disaster preparedness, and they require significant assistance from voluntary agencies and non-governmental organizations. Bylsma claims that what is unclear is how citizens fit inside this framework, arguing that other than Citizen Corps, the Red Cross, and other community outreach organizations, there is currently no other means for educating individual citizens to become more proactive. Therefore, she identifies this as a gap in the current disaster preparedness model. She advocates for a better informed, and thus, a better prepared community, making it more capable of effectively dealing with a crisis. Bylsma suggests a community model in which its citizens understand their true risks and how to react to those risks, which would result in the community collectively being more resilient.³³

For the 2009 CHDS essay contest, George Ewing authored “The Department of Homeland Security Initiative for Community Empowerment and Security: A Community-Based Approach to Homeland Security” in which he suggested the implementation of an initiative to focus on utilizing and improving the existing relationship between the Department of Homeland Security and local populations, schools, and businesses through local municipalities.³⁴ He envisioned the initiative facilitating community educational activities to inform local citizens about potential vulnerabilities, prevention, and sustenance in the event of a man-made or natural disaster. This locally implemented initiative would be inclusive of all groups within the community and utilize diverse venues (churches, synagogues, mosques, community centers, etc.). His paper also explained similar processes to be implemented locally with the business community, as well as within the school system. Ewing argued that the engagement of individuals and entire communities at the local level in the homeland

³² Jessica Bylsma, “Unacceptable Gaps: Community Grassroots Involvement in Homeland Security,” Naval Postgraduate School, 2010, <https://www.hsdl.org/?view&did=696051>.

³³ Ibid.

³⁴ George Ewing, “The Department of Homeland Security Initiative for Community Empowerment and Security: A Community-Based Approach to Homeland Security,” Naval Postgraduate School, 2009, <https://www.hsdl.org/?view&did=696047>.

security enterprise might be an effective way of increasing the preparedness and resilience of our nation.³⁵

In response to the requirements of *Presidential Policy Directive 8: National Preparedness* (PPD-8), FEMA developed a campaign to build and sustain national preparedness.³⁶ The campaign, “America’s PrepareAthon” was officially launched in September 2013 during National Preparedness month. The goals of the campaign are to increase the number of individuals who: understand the hazards most relevant to their community, know the corresponding action to stay safe and mitigate damage, practice real-time behavior to increase their preparedness, and participate in whole community planning.³⁷ More so than previous efforts, this campaign is more research-driven with the intended purpose of leading to more resilient communities. The campaign is based on one model of behavioral change, the transtheoretical model of behavior change, more commonly referred to as the stages of change model, which will be discussed in greater detail in the next section.

According Jim McKay in the article “The Preparedness Message Isn’t Reaching the Public, “Experts say either the preparedness message isn’t getting across, or the wrong message is being sent.”³⁸ McKay goes on to explain that in a recent survey conducted by the Ad Council, 17 percent of respondents said they were very prepared for an emergency situation, which means they have a kit and a plan to take care of themselves during the first few days of disaster.³⁹ However, the survey data also reported that just 23 percent said they have a plan to communicate with family members if there is no cellular telephone service.⁴⁰

³⁵ Ibid.

³⁶ Federal Emergency Management Agency, “New Grassroots Campaign to Increase Community Preparedness,” new release, September 5, 2013, <http://www.fema.gov/news-release/2013/09/05/new-grassroots-campaign-increase-community-preparedness>.

³⁷ Federal Emergency Management Agency, “America’s PrepareAthon,” accessed October 14, 2013, <http://www.fema.gov/americas-prepareathon>.

³⁸ Emergency Management, “The Preparedness Message Isn’t Reaching the Public,” November 12, 2012, <http://www.emergencymgmt.com/disaster/Preparedness-Message-Isnt-Reaching-Public.html>.

³⁹ Ibid.

⁴⁰ Ibid.

In the article “Why Aren’t Disaster Preparedness Messages Sticky?,” author Valerie Lucas-McEwen claims that preparedness messages must be changed to contain content that is so memorable and has such an impact they are vividly recalled with just a few clues.⁴¹ She goes on to say that emergency managers create messages based on what they know, not recognizing that those messages may not resonate with people who are not emergency managers.⁴² Lucas-McEwen’s references to “sticky messages” are tied to Malcolm Gladwell’s book, *The Tipping Point: How Little Things Can Make a Big Difference*, in which Gladwell asks, “Is the message—or the food, or the movie, or the product—memorable? Is it so memorable, in fact, that it can create change, that it can spur someone to action?”⁴³ Similar to Gladwell’s book, authors Chip and Dan Heath claim in their book, *Why Some Ideas Survive and Others Die*, that “sticky messages” have six principles in common: simplicity, unexpectedness, concreteness, credibility, emotions, and stories.⁴⁴ They claim ideas that take hold draw from the common set of traits listed above, which make them more likely to succeed.⁴⁵

To help messages stick, FEMA has recently enlisted public relations firms to assist with marketing and message development. In a solicitation in February 2013, the agency stated that it would like to hire a “strategic partner with world renowned advertising, interactive, public relations and social media agency experience.”⁴⁶ To assist with the Ready campaign, FEMA is looking for a vendor with a proven track record in developing public service announcements and other communications “designed to inspire change.”⁴⁷

⁴¹ Valerie Lucas-McEwen, “Why Aren’t Disaster Preparedness Messages Sticky?,” March 2013, http://www.emergencymgmt.com/templates/gov_print_article?id=199763151.

⁴² Ibid.

⁴³ Malcolm Gladwell, *The Tipping Point: How Little Things Can Make a Big Difference* (New York: Little, Brown and Company, 2000), 92.

⁴⁴ Chip Heath and Dan Heath, *Made to Stick: Why Some Ideas Survive and Others Die* (New York: Random House, 2008), 14–19.

⁴⁵ Ibid., 15.

⁴⁶ “FEMA Reaches out to PR Firms for Help with Ready Campaign,” *Homeland Security Today*, February 20, 2013, <http://www.hstoday.us/briefings/industry-news/single-article/fema-reaches-out-to-pr-firms-for-help-with-ready-campaign/08b4ea676061f243ecdce722c9351a5a.html>.

⁴⁷ Ibid.

2. Behavioral Change

There is a great deal of literature that recognizes the need to more fully consider the psychological and social aspects of frameworks for how individuals move through a behavior change process: That is, how people receive information about emergency risks, perceive those risks, and behave in relation to the risks.⁴⁸ Developed by James Prochaska and Carlo DiClemente, the stages of change model, or transtheoretical model of behavior change, states that behavior change is not an event, but rather a process. In this conceptualization, individuals move through five distinct stages that indicate their readiness to attempt, make or sustain behavior change. These five stages are precontemplation, contemplation, preparation, action, and maintenance.⁴⁹ Launched by FEMA in September 2013, the America's PrepareAthon campaign is based on this model and has the goal of increasing preparedness of individuals and communities by providing materials and messages that will increase perceived efficacy and inspire more individuals to take actions to better prepare themselves and their communities.

The fall 2006 *Citizen Corps Preparedness Review* presented the Citizen Corps personal disaster preparedness (PDP) model.⁵⁰ This behavioral model describes the various factors that may influence whether or not a person engages in disaster preparedness activities. The PDP model is based on two theoretical models that are common to the social sciences and have been applied in other risk assessment and protection motivation work, the extended parallel process model (EPPM), which is based on fear appeals, and the stages of change or transtheoretical model (TTM). The PDP model explores personal motivation factors and identifies way to target individuals based on their motivation for, or perceived barriers to, preparedness.⁵¹

⁴⁸ Jessica Enders, *Measuring Community Awareness and Preparedness for Emergencies*, Australian Journal of Emergency Management 16, no. 3 (2001): 52–58.

⁴⁹ Federal Emergency Management Agency, *Personal Preparedness in America*, 25.

⁵⁰ Federal Emergency Management Agency, "Citizen Corps Personal Behavior Change Model for Disaster Preparedness," *Citizen Preparedness Review* no. 4 (Fall 2006), http://www.citizencorps.fema.gov/downloads/pdf/ready/citizen_prep_review_issue_4.pdf, 2.

⁵¹ Ibid.

In his 2010 Naval Postgraduate School thesis, “Community Preparedness: Creating a Model for Change,” Nick Campasano analyzes this model in detail, as well as the foundation models used to develop it (EPPM and TTM).⁵² In his conclusion, Campasano claims that although the Citizen Corps personal behavioral change model for disaster preparedness was built upon a foundation of two recognized and frequently used behavior change models, the focus of the model is primarily on the individual and largely ignores the social aspects that influence an individual’s beliefs, attitudes and, behaviors.⁵³

Self-efficacy is defined by Albert Bandura as “people’s beliefs about their capabilities to produce designated level of performance that exercise influence over events that affect their lives.” He claims that self-efficacy beliefs determine how people feel, think, motivate themselves and behave.⁵⁴ Kim Witte, a psychologist specializing in the areas of fear appeals and arousal, and threat efficacy, claims that if we want to change people’s behaviors in areas that typically have fear associated with them, we should follow a prescribed formula that increases the likelihood that the messages will, in fact, lead one to engage in protective (preparedness) activities.⁵⁵ In her article, “Putting the Fear Back into Fear Appeals: The Extended Parallel Process Model,” Witte argues that if used correctly, fear appeals have great potential for stimulating adaptive behavior change. Elements of protection motivational theory (PMT), first introduced by R. W. Rogers in 1975, are integrated into Witte’s extended parallel process model (EPPM) because the PMT explains the danger control processes that lead to message acceptance. However, unlike the PMT, the EPPM specifies the variables and processes leading to maladaptive responses, which the PMT does not do. Specifically, the EPPM argues that high fear, first caused by high perceived threat, and then intensified by low perceived efficacy, elicits

⁵² Nick Campasano, “Community Preparedness: Creating a Model for Change” (master’s thesis Naval Postgraduate School, Monterey, CA), 39–52

⁵³ Ibid., 53.

⁵⁴ Albert Bandura, “Self-efficacy: Toward a Unifying Theory of Behavior Change,” *Psychological Review* 84 (1977): 191–215.

⁵⁵ Kim Witte, “Putting the Fear Back into Fear Appeals: The Extended Parallel Process Model,” *Communication Monographs* 59 (December 1992): 329–349, [achttps://www.msu.edu/~wittek/fearback.htm](https://www.msu.edu/~wittek/fearback.htm).

defensive motivation, which induces maladaptive outcomes.⁵⁶ According to Witte, the EPPM demonstrates that fear directly causes maladaptive responses, but that fear can be indirectly related to adaptive responses, as long as it is cognitively appraised. In simpler terms, threat determines the degree of intensity of the response, while efficacy determines the nature of the response.⁵⁷

In his book, *The Time Paradox*, Philip Zimbardo puts forth the conceptual time perspective model and the Zimbardo time perspective inventory (ZTPI).⁵⁸ Zimbardo argues that the actions of individuals are impacted by their psychology orientation as related to time. He explains that individuals are past-oriented, present-oriented or future-oriented, and this orientation impacts an individual's decision making process as to course of action or inaction.⁵⁹

In an article published in the *Journal of Aggression, Maltreatment & Trauma*, authors Reisman, Spencer, Tanielian and Stein state that knowledge impacts the risk appraisal process.⁶⁰ The authors claim adherence behavior is determined, in part, by individual appraisal of the risks and benefits derived by either following recommended actions or not. Individual risk appraisals are derived from past experiences, biases, beliefs, knowledge, and social influences.⁶¹ Thus, knowledge or information about risks and associated protective or preparedness actions is only one of many factors that affect behavioral change. A combination of factors is usually required to lead individuals to move through the stages of change process.

The 2013 *National Preparedness Report* states that public engagement in preparedness activities remains limited, in part because of individual knowledge and

⁵⁶ Ibid.

⁵⁷ Ibid.

⁵⁸ Philip Zimbardo and John Boyd, *The Time Paradox: The New Psychology of Time That Will Change Your Life* (New York: Free Press, 2008). 51.

⁵⁹ Ibid., 52.

⁶⁰ Dori B. Reissman, Shauna Spencer, Terri L. Tanielian, and Braddley D. Stein, "Integrating Behavioral Aspects into Community Preparedness and Response Systems," *Journal of Aggression, Maltreatment & Trauma* 10, no.3-4 (2005): 707-720.

⁶¹ Ibid.

perceptions about threats and hazards.⁶² The report cites a Wharton School survey of over 500 mid-Atlantic households just prior to Sandy's landfall in 2012. The Wharton School survey data showed that residents' misperceptions about the risks associated with the storm influenced their preparedness actions.⁶³ Although most residents took basic actions to prepare, such as assembling supplies, a relatively low percentage of those surveyed (19 percent) planned to heed the evacuation advisories.⁶⁴

There is more literature that deals with these same issues of threat messaging and risk messaging, and how individuals interpret and respond to these messages. Most of the literature leads to similar conclusions, that individuals take action based on their individual perception of risk.

3. Trusted Messengers

A considerable amount of literature exists from the National Center for Disaster Preparedness (NCDP). Founded in 2003 by Irwin Redlener, MD, the NCDP engages the public health workforce and communities in preparing for catastrophic events, while helping to integrate preparedness efforts into the nation's existing infrastructure. Since 2002, the center has conducted an annual survey of public attitudes and personal preparedness. A key aspect to these surveys has been the measurement of the public's confidence in the government to provide accurate and reliable information. A finding from the 2007 survey was that public has a higher degree of trust in local responders versus any other level of government (i.e., state or federal); more than a third (37 percent) believed that if there was a major disaster, help would arrive within an hour from local responders.⁶⁵

More important is who is providing the threat and risk messages and the confidence the public has in the source of the information. According to *The American Preparedness Project: Where the U.S. Stands in 2007 Terrorism, Security and Disaster*

⁶² U.S. Department of Homeland Security, *National Preparedness Report 2013*, 31.

⁶³ Ibid.

⁶⁴ Ibid.

⁶⁵ National Center for Disaster Preparedness, *The American Preparedness Project*, 2.

Preparedness, published by the National Center for Disaster Preparedness, Americans trust the Centers for Disease Control (CDC) to give them accurate and reliable information (84 percent).⁶⁶ Only 63 percent of Americans polled trust FEMA to provide reliable and accurate information, which was less trust than they had in a mayor (75 percent) or the sheriff or police commissioner (82 percent).⁶⁷ The least trusted source of information is the president at 49 percent, and more Americans trusting a television medical correspondent (71 percent) to give them reliable information.⁶⁸ Most Americans would be persuaded to prepare for a public health emergency if instructed to do so by the CDC (86 percent) or by their regular doctor (87 percent).⁶⁹ Doctors remain trusted, credible sources in the eyes of most people and often provide the first contact for those who are injured by attacks.⁷⁰

Trust in the messenger bears out what Malcolm Gladwell writes about in his book *The Tipping Point: How Little Things Can Make a Big Difference*.⁷¹ Gladwell agrees that who delivers the message is important. In the course of discussing the importance of message content, he states “...the messenger matters: messengers are what make something spread.”⁷²

In her 2012 Naval Postgraduate School thesis, “Resilient Communication: A New Crisis Communication Strategy for Homeland Security,” Sharon Watson analyzed crisis communications strategies and recommended a public partnership approach. Her research concludes that specific messaging, delivered by leaders who familiar to the impacted residents, is most effective.⁷³

⁶⁶ Ibid., 6.

⁶⁷ Ibid.

⁶⁸ Ibid.

⁶⁹ Ibid.

⁷⁰ Bruce Bongor et al., *Psychology of Terrorism* (New York: Oxford University Press, 2007), 367.

⁷¹ Gladwell, *The Tipping Point*, 92.

⁷² Ibid.

⁷³ Sharon Watson, “Resilient Communication: A New Crisis Communication Strategy for Homeland Security” (master’s thesis, Naval Postgraduate School, Monterey, CA), 93–94.

This literature draws a clear correlation to message acceptance and willingness to act, as related to source of the information. Local officials, uniformed officials, and medical personnel appear to be the most trusted deliverers of information, in terms of effectiveness and action.

4. Financial Resources and Investments

Throughout the history of emergency management planning, consideration for individual and community preparedness has been inadequate, according to Tim Manning, FEMA's Deputy Administrator for National Preparedness.⁷⁴ This was part of Manning's testimony during a 2009 U.S. House Homeland Security Committee subcommittee hearing on citizen and community preparedness. He further claimed that since September 11, 2001, and the creation of the Department of Homeland Security, the United States has invested tens of billions of dollars in bolstering government's preparedness while paying comparatively little attention to personal and community preparedness.⁷⁵

Currently within FEMA, community preparedness is a vastly under-resourced area. A recent GAO report stated the operating budgets for community preparedness programs currently represent less than one-half of one percent of FEMA's total budget.⁷⁶ In fiscal year 2009, FEMA's overall budget was about \$7.9 billion, of which about \$5.8 million was dedicated to operating community preparedness programs and \$2.1 million was for the Ready Campaign.⁷⁷ This claim is supported by the fact that for FY2008 less than \$15 million (\$14,572,500) was allocated nationally for Community Preparedness grant programs (e.g., Citizens Corps Programs [CCP]).⁷⁸

In her Naval Postgraduate School 2008 thesis, "What Is Going to Move the Needle on Citizen Preparedness? Can America Create a Culture of Preparedness,"

⁷⁴ U.S. House of Representatives Homeland Security Committee, Subcommittee on Emergency Communications, Preparedness, and Response, *Preparedness: State of Citizen and Community Preparedness*, 111th Cong., 1 (2009), <http://chsdemocrats.house.gov/hearings/index.asp?ID=215>.

⁷⁵ Ibid.

⁷⁶ U.S. Government Accountability Office, *Emergency Management*, 2.

⁷⁷ Ibid.

⁷⁸ Ibid., 18.

Annemarie Conroy stated that a review of the Citizen Corps budget from the inception of the Department of Homeland Security in March 2003 through the FY2008 budget request provided an interesting glimpse at the priority placed by DHS on citizen preparedness. Conroy's claim was that "For a massive, nationwide effort to create a culture of preparedness, minimal funding has been given to the effort of citizen preparedness, compared to the overall budget of DHS."⁷⁹

In her 2009 Naval Postgraduate School thesis, "Measuring Preparedness: Assessing the Impact of the Homeland Security Grant Program," Pamela Broughton states that since the creation of the U.S. Department of Homeland Security (DHS) in 2003, DHS has awarded over 28.7 billion dollars in grant funds to entities of states, locals, territories and tribal to enhance prevention, protection, response, and recovery efforts, but the homeland security community continues to struggle with measuring the impact these investments have made toward improving preparedness.⁸⁰ Although not specific to the resources allocated to individual and community preparedness, her research supports the claim that the lack of risk-informed performance measures has hampered our ability to assess our preparedness investments.

In a related issue, the inability of the homeland security / emergency management community to clearly define "homeland security" and what missions that enterprise either includes or excludes could also be impacting the allocation and prioritization of resources. In *Defining Homeland Security: Analysis and Congressional Considerations*, a January 2013 report prepared by the Congressional Research Service (CRS), the author states that the failure of the U.S. Department of Homeland Security (DHS) to prioritize its missions, along with there the lack of clarity in the national strategies of federal, state and local roles and responsibilities, may potentially be causing funding to drive priorities, rather than priorities driving the funding.⁸¹

⁷⁹ AnneMarie Conroy, "What is Going to Move the Needle on Citizen Preparedness? Can America Create a Culture of Preparedness?" (master's thesis, Naval Postgraduate School, Monterey, CA), 24.

⁸⁰ Pam Broughton, "Measuring Preparedness: Assessing the Impact of the Homeland Security Grant Program" (master's thesis, Naval Postgraduate School, Monterey, CA, 2009), v.

⁸¹ Shawn Reese, *Defining Homeland Security: Analysis and Congressional Considerations* (Washington, DC: Congressional Research Service, 2013), 13.

In September 2012, FEMA announced a funding opportunity to that appears to be a creative effort in identifying resources from outside of the government to assist in funding preparedness and resilience activities.⁸² The FEMA 2012 Community Resilience Innovation Challenge made limited funding available through the Rockefeller Foundation to agencies, institutions, business entities, associations, organizations, or groups operating within local jurisdictions. The funds are intended to foster community resilience nationally by identifying needs, mobilizing partners, and creating innovative, motivational, and effective solutions that can be grown, sustained, and replicated.⁸³

In addition to partnering with the Rockefeller foundation for the funding, the agency also enlisted the Los Angeles Emergency Management Foundation to administer the program. Recipients of the funds (limited to \$35,000 per award) were selected by an independent application review committee comprised of disaster management professionals and other subject matter experts. In May 2013, FEMA announced the 30 recipients of the funds out of the more than 1,900 applications received.⁸⁴ Until the funds are expended, projects are completed and evaluations conducted, it will be difficult to evaluate the effectiveness of this program.

5. Literature Review Conclusion

In conclusion, this literature review reveals and abundance of publications advising of the importance of individuals and families being informed of the types of emergencies that could affect them, creating and exercising a family emergency plan, and having and emergency supply kit. There is a plethora of literature from governmental and non-governmental organizations containing lists and checklists pertaining to the kits and emergency plans, as well as the types of hazards that can be faced in different geographic areas. The literature also clearly relates the importance of citizen preparedness and

⁸² Federal Emergency Management Agency, "FEMA Announces 2012 Community Resilience Innovation Challenge," news release, September 27, 2012, <http://www.fema.gov/news-release/2012/09/27/fema-announces-2012-community-resilience-innovation-challenge-1>.

⁸³ Ibid.

⁸⁴ Ibid.

having the capability to take care of themselves and their families for a few days until additional resources become available.

Documents on survivor psychology during or following a crisis are also plentiful. A large amount of literature exists that recognizes and examines the need to more fully consider the psychological aspects of moving through the behavior change process. However, there is a gap in the literature on how to elicit behavioral change in individuals prior to a crisis or a disaster. Literature focused on methods and messages to encourage preparedness engagement by citizens is limited.

A significant amount of literature exists on the importance of messages being delivered by messengers trusted by the audiences of the messages, including the delivery of risk and hazard information, as well as actions to be taken in preparation for and/or response to those risks and hazards. Literature from a variety of authors and organizations articulate the correlation of message acceptance to the source or provider of the information.

Federal budgetary information is present in the literature. What is not as available is an inclusive accounting of resources provided for individual and community preparedness at the state and local levels, for the entire country. A contributing factor to this gap could be the lack of clear definitions for what “preparedness” really is and how can it be measured, which coincides with the ongoing discourse on defining “homeland security.” While the literature contains a significant amount of survey data related to preparedness issues, a clear definition of success is absent. Although discussed in the literature, clear definitions are still lacking. Without clearly defined terms, it is difficult to delineate outcome-based risk-informed performance measures, and thus assess preparedness investments. The research and resulting recommendations of this thesis will add to the literature and contribute to the national discussion on citizen engagement in homeland security.

E. HYPOTHESES AND TENTATIVE SOLUTIONS

The general premise on which this research is based is that we in the homeland security community have attempted the same tactics over and over again with limited success with regard to persuading individuals and the general public to engage in preparedness activities. We seem to be stuck in a repeating pattern of inaction, and years of survey data support this claim. If we cannot fully determine or agree on the reasons for this lack of success, we need to try something new, such as exploring examples of individual engagement in other fields which have demonstrated success. It is time to unpack the strategies and salient qualities of these successful models and determine if they can be replicated in homeland security preparedness.

There is evidence of success in other fields, such as public health messaging, product marketing, various safety campaigns, etc. This is what was investigated more fully in the research for this thesis. Alternative threat and risk messaging may be needed to effectively communicate to the public in such a way as to invite, encourage, and motivate people to move beyond awareness and acceptance and to take action. Perhaps we need to streamline the preparedness messages to the public, or revamp the entire approach to preparedness planning. Homeland security stakeholders need to deliver preparedness messaging in alternative ways to the general public to motivate individuals to engage in preparedness activities, which would increase citizen preparedness in the United States.

The findings of this research and resulting recommendations require a new direction and a new mindset. In addition, a new mindset will undoubtedly present obstacles and challenges, one of which is certainly the need for increased or redirected financial resources to focus on and tackle this problem, if it is truly a national priority. However, by experimenting with new strategies, alternative messages and messengers, we have far more to gain than we have to lose.

F. METHOD

Using appreciative inquiry and purposeful best practices sampling, the models of fire prevention and safety, and seat belt safety were selected. A third model examined was individual and community preparedness in the United Kingdom.

Sampling as a research method is at least partially credited to William Cochran, a professor of statistics. While at Harvard University, he published his classic text *Sampling Techniques* in 1953,⁸⁵ in which Cochran argued sampling provides the following benefits over complete enumeration: reduced cost, greater speed, greater scope, and greater accuracy.⁸⁶ Purposive sampling is primarily used in qualitative studies and maybe defined by selecting units (i.e., individuals, groups of individuals, institutions, organizations) based on specific purposes associated with answering a research study's questions, rather than being selected randomly.⁸⁷

According to Cooperrider and Whitney, when defining appreciative inquiry in 1986:

Appreciative Inquiry (AI) is the cooperative search for the best in people, their organizations, and the world around them. It involves systematic discovery of what gives a system 'life' when it is most effective and capable in economic, ecological, and human terms. AI involves the art and practice of asking questions that strengthen a system's capacity to heighten positive potential. It mobilizes inquiry through crafting an 'unconditional positive question' often involving hundreds or sometimes thousands of people.⁸⁸

In the context of this thesis, an explanation by Sue Hammond from her book *The Thin Book of Appreciative Inquiry* is particularly applicable in selection of purposeful samples. According to Hammond:

⁸⁵ William Cochran, *Sampling Techniques* (New York: Wiley and Sons, 1953).

⁸⁶ Ibid.

⁸⁷ Charles Teddlie and Fen Yu, "Mixed Methods Sampling: A Typology with Examples," *Journal of Mixed Methods Research* 1, no.1 (2007): 77–100.

⁸⁸ David L. Cooperrider and Diana Whitney, "Appreciative Inquiry: A Positive Revolution in Change," in *The Change Handbook*, ed. Peggy Holman and Tom Devane, 245–263 (San Francisco, CA: Berrett-Koehler Publishers).

The traditional approach to change is to look for the problem, do a diagnosis, and find a solution. The primary focus is on what is wrong or broken; since we look for problems, we find them. By paying attention to problems, we emphasize and amplify them. Appreciative Inquiry suggests that we look for what works in an organization. The tangible result of the inquiry process is a series of statements that describe where the organization wants to be, based on the high moments of where they have been. Because the statements are grounded in real experience and history, people know how to repeat their success.⁸⁹

The appreciative inquiry approach, coupled with the purposeful sampling method, was selected because the samples selected appear to be working more effectively than the methods used to date in the United States for citizen engagement in preparedness activities. Purposeful sampling targets cases that have similar constraints. This method allows for the selection of programs that target the same population sets desired for preparedness. Additionally, the selected cases have a close relationship with homeland security in that they have goals of engaging citizens and communities to take responsibility for themselves and to take individual action to increase safety for themselves, their families and their communities.

Supported by previously identified survey data, the research identified that the current approach to individual preparedness does not appear to be working. Second, research was conducted to identify a small set of best practices applied in other or related disciplines that have been demonstrated to be more effective in changing individual behavior and prompting action.

The models examined as best practices are fire prevention and safety and seat belt safety. The selection of fire prevention / fire safety and seat belt safety is based on two factors: (1) these programs target the same population sets we are attempting to reach with individual and community preparedness; and (2) they have a close relationship with homeland security, in that they both have goals of engaging citizens and communities to take responsibility for themselves and to take individual action to increase safety for themselves, their families, and their communities. Additionally, there is literature and

⁸⁹ Sue Annis Hammond, *The Thin Book of Appreciative Inquiry*, 2nd ed. (Plano, TX: Thin Book Publishing Company, 1998), 6.

data for both of these programs that allow for a realistic comparison to citizen engagement in preparedness activities (i.e., National Highway Traffic Safety Administration and National Fire Protection Association survey data).

The first model, the Click It or Ticket seat belt campaign has been very effective in the United States. According to the National Highway Traffic Safety Administration, this campaign is the most successful seat belt enforcement campaign ever, helping create the highest national seat belt usage rate of 86 percent (2012).⁹⁰ The nation has also utilized a multitude of fire prevention and fire safety campaigns, the second model, over the years as part of National Fire Prevention Day and Fire Prevention Week that has achieved significant results. These programs have brought us slogans such as “Stop, drop and roll,” which has remained in our consciousness for over 20 years. The third model examined is individual and community preparedness in the United Kingdom. The United Kingdom is subject to similar threats as those in the United States, such as natural hazards, potential health emergencies such as pandemic influenza or foot and mouth disease, and terrorism.

Research and a comparative analysis of the legislative basis, policies, programs, and methods utilized by the United Kingdom in the area of individual/community preparedness and citizen engagement in preparedness for terrorism and other emergencies was conducted. Based on the analysis, applicable UK solutions to this American problem are presented for consideration in the United States.

The analysis of these models identifies the strategic approach, implementation plans, target audiences, messages, and messengers. The evaluation includes whether the approach is top-down or bottom-up, individual based or community based, utilizes existing organizations and organizational structures or the creation of new organizations or structures, and utilization of schools systems for awareness, education and engagement. The analysis also includes an evaluation of associated funding and resources for the implementation of the programs.

⁹⁰ National Highway Traffic Safety Administration’s National Center for Statistics and Analysis, *Traffic Safety Facts: Research Note* (DOT HS 811 691) (Washington, DC: U.S. Department of Transportation), 2.

These best practices and the international model are then applied to the United States homeland security discipline, specifically in the area of individual, family, and community preparedness. Based on the research and analysis, the thesis puts forth recommendations for future policy consideration, as well as practical applications for homeland security practitioners to increase individual engagement in preparedness efforts in the United States.

G. OVERVIEW OF CHAPTERS

The following chapters expand upon the ideas about community preparedness and citizen engagement in homeland security presented in Chapter I.

Chapter II provides a description and analysis of fire prevention and fire safety efforts in the United States. This includes key principles of the programs, involved stakeholder groups, target audiences, and metrics achieved over the past 20-plus years.

Chapter III focuses on the ongoing seat belt safety campaign in this country. Again, it addresses the key components of the program and intended audiences. In addition, it discusses results achieved and provides an analytical rationale as to why this program has been so successful in steadily increasing seat belt usage since 1994.

Chapter IV examines individual and community preparedness in the United Kingdom. As the UK is subject to similar threats and hazards as those in the United States, this chapter provides a comparative analysis of the legislative basis, policies, programs and methods utilized by the United Kingdom in the area of individual/community preparedness and citizen engagement in preparedness for terrorism and other emergencies. It then presents applicable UK solutions to this American problem to be considered for implementation in the United States.

And finally, Chapter V provides recommendations for future actions and possible areas of focus to improve the level of preparedness of individuals and communities, which would increase our nation's resilience to disasters. It provides a conclusion on how the thesis supports the hypothesis and addresses areas for possible future research consideration.

II. FIRE PREVENTION AND FIRE SAFETY

This chapter examines fire prevention and fire safety programs in the United States. It begins with a discussion of the background and history of fire prevention week, followed by the primary theories and principals of fire prevention and safety programs. This includes involved stakeholder groups, target audiences and program metrics. Program metrics and impacts are then examined, followed by discussion of the key strategies and activities of the programs that have contributed to positive results.

A. BACKGROUND / HISTORY

Fire prevention week was established in 1922 to commemorate the Great Chicago Fire, the tragic 1871 fire that killed more than 250 people, left 100,000 homeless, destroyed more than 17,400 structures and burned more than 2,000 acres.⁹¹ The fire began on October 8, but it continued into and did most of its damage on October 9, 1871. Those who survived the Chicago and other major fires never forgot what they had been through.

These fires changed the way firefighters and public officials thought about fire safety. On the fortieth anniversary of the Great Chicago Fire, the Fire Marshals Association of North American, today known as the International Fire Marshals Association, decided that the anniversary of the Great Chicago Fire should henceforth be observed with festivities, but in a way that would keep the public informed about the importance of fire prevention. The commemoration grew incrementally more official over the following years.

In 1920, President Woodrow Wilson issued the first National Fire Prevention Day proclamation. Since 1922, Fire Prevention Week has been observed on the Sunday through Saturday period in which October 9 falls. According to the National Archives and Records Administration Library Information Center, Fire Prevention Week is the

⁹¹ National Fire Protection Association, "About Fire Prevention Week," April 22, 2013, <https://www.nfpa.org/safety-information/fire-prevention-week/about-fire-prevention-week>.

longest running public health and safety observance on record. The president has signed a proclamation observance that week every year since 1925.

B. THEORIES / PRINCIPLES

Leading the charge with regard to fire prevention and safety is the National Fire Protection Association (NFPA). The NFPA is an international nonprofit organization, established in 1896, with a mission to reduce the worldwide burden of fire and other hazards on the quality of life by providing and advocating consensus codes and standards, research, training, and education. NFPA is recognized as the world's leading advocate of fire prevention, with more than 70,000 individual memberships around the world, and it has been the official sponsor of Fire Prevention Week since 1922.

One of the key audiences year-round, but especially during the annual Fire Prevention Week, is our nation's youth, especially preschool through fifth grade. Fire Prevention Week classroom kits are created through the NFPA for both teachers and students to teach and reinforce fire safety skills with students. These materials are made available in both English and Spanish at no cost via the NFPA website.

The NFPA has also been creative in developing partnerships with the private sector to disseminate fire safety messages. During Fire Prevention Week 2012, the NFPA teamed up with Domino's Pizza for the fifth consecutive year to deliver fire safety messages. In participating markets in the United States, pizza delivery boxes from Domino's included important fire safety messages. In addition, some deliveries were provided by local fire engines. If all the smoke alarms in the home were working correctly, the pizza was free.⁹² If a smoke alarm was not working, the firefighters would replace the batteries or install a fully functional fire safety device in the home.

The theme chosen for Fire Prevention Week 2013 was "Prevent Kitchen Fires." The outreach materials for the 2013 thus focused on issues home fires; specifically

⁹² National Fire Protection Association, "Domino's Pizza Teams Up with the National Fire Protection Association to Deliver Fire Safety Messages," October 2, 2013, <http://www.nfpa.org/press-room/news-releases/2013/dominos-pizza-teams-up-with-the-national-fire-protection-association-to-deliver-fire-safety-messages>.

providing prevention information on cooking, heating, smoking materials, electrical, candles, home escape planning, and smoke alarms.

C. METRICS / IMPACTS

The NFPA's Fire Analysis and Research division supports NFPA programs and the fire community by providing reports and statistics on the loss of life and property from fires. The division produces many reports each year on the overall fire problem, firefighter fatalities and injuries in the United States, major fire causes, fire protection systems, and many more. The independent nonprofit Fire Protection Research Foundation collaborates with research organizations throughout the world, investigating new technologies and documenting the performance of fire and building related products, all in support of the NFPA mission.⁹³

Since the first year of available data (1977), reported fires and fire deaths have fallen over this 30 year period. Survey data from fire departments through 2011 shows that reported fires dropped 57 percent from 1977 (3,264,000) to 2011 (1,389,500).⁹⁴ The same survey data shows that civilian fire deaths in 2011 (3,005) was the lowest since data collection began in 1977 (7,395), excluding the 2,451 deaths on September 11, 2001.⁹⁵ This equates to a 59 percent reduction from 1977–2011.⁹⁶

Overall, most measures utilized in the NFPA survey data show a steady improvement over time. What is not entirely clear is how much of decline in fires and civilian fire deaths can be directly attributed to the efforts of the NFPA through fire prevention and fire safety campaigns. However, based on the data, one can conclude that the two are related.

⁹³ National Fire Protection Association, "The Latest Statistics, Research and News about Fire," accessed October 8, 2013, <http://www.nfpa.org/research/?p=1>.

⁹⁴ Ibid., 1.

⁹⁵ Ibid., 5.

⁹⁶ Ibid.

On the flip side, according to another NFPA survey, only one-third of Americans have both developed and exercised a home fire escape plan.⁹⁷ However, while nearly three-fourths of Americans have an escape plan, more than half have never practiced it.⁹⁸ Thus, there is still certainly room for improvement in this particular area.

D. DISCUSSION

One of the key elements of this fire prevention and safety program is that there is a national campaign at the same time each year that involves not only fire fighters, but also public officials, celebrities, and the private sector. The annual Fire Prevention Week theme is also pushed to the public through voluntary and purchased media. Another key element is the targeting of preschool through grade five aged children in our school systems. These messages and programs are primarily implemented at the local level. For example, for Fire Prevention Week, NFPA has teamed up with both Domino's Pizza and local fire departments to raise awareness of fire safety and ensure people had working smoke alarms in their homes.

Fire prevention and fire safety programs provide a realistic model for comparison to the homeland security mission in terms in citizen engagement. While more narrowly focused, both in terms of content and primary target audience, those programs have utilized methods and messaging techniques that could be applied to engaging citizens in preparedness activities in the homeland security mission space.

⁹⁷ National Fire Protection Association, "Fast Facts about Fire," April 22, 2013, <http://www.nfpa.org/safety-information/fire-prevention-week/fast-facts-about-fire>, 2.

⁹⁸ Ibid.

III. SEAT BELT SAFETY

The topic of this chapter is seat belt safety. Again, the research conducted was specific to the United States. The same method and areas of focus were followed in this chapter as we examined in the previous chapter on fire safety and prevention programs. The chapter begins with a discussion of the background and history of the seat belt campaigns in this country. Following that section is an examination of primary theories and principals of the campaign, and then a discussion of target audiences and stakeholder groups, as well as program metrics. The chapter concludes with analysis of the characteristics of the campaign that may have led, or at least have significantly contributed to its current level of success.

A. BACKGROUND / HISTORY

Seat belt use has been increasing steadily since 1994. The Click It or Ticket model has been enormously successful in increasing safety belt use at the community, state, and regional levels. Seat belt use in 2012 was estimated at 86 percent, an increase of 28 percent over an estimated usage of 58 percent in 1994.⁹⁹ Before the passage of seat belt use laws, voluntary use of belts in the United States was extremely low. Laws improved use, but by themselves were insufficient. Surveys conducted in major cities in the 1970s by observational methods indicated that belt usage was approximately 10 percent.¹⁰⁰

The first statewide Click It or Ticket campaign took place in North Carolina in 1993, followed by a similar campaign in South Carolina in 2000.¹⁰¹ The success was significant enough that the program was implemented in eight southeastern states in 2001, followed by 18 additional states across the country in 2002.¹⁰²

⁹⁹ National Highway Traffic Safety Administration, *Traffic Safety Facts*, 1.

¹⁰⁰ National Highway Traffic Safety Administration, *Analyzing the First Years of Click It or Ticket Mobilizations* (DOT HS 811 232) (Washington, DC: Department of Transportation, 2010), 1.

¹⁰¹ *Ibid.*, 2–3.

¹⁰² *Ibid.*, 3.

The U.S. modeled its seat belt safety program on a previously successful initiative conducted by our neighbors to the north, Canada, where similar laws were enacted in the mid-1970s. A Click It or Ticket campaign was fully implemented and evaluation in 10 States in May 2002. This initiative, which involved a partnership between the National Highway Traffic Safety Administration (NHTSA), the Air Bag and Safety Belt Safety Campaign, and hundreds of law enforcement agencies, helped to raise safety belt use an average of nine percentage points among these 10 states. The campaign, which became nationwide in 2003, is still ongoing.

B. THEORIES / PRINCIPLES

There are two types of safety laws: primary and secondary. The *primary* (standard) safety belt law allows law enforcement officers to stop a vehicle and issue a citation when the officer simply observes an unbelted driver or passenger. A *secondary* safety belt law means that a citation for not wearing a safety belt can only be issued after the officer stops the vehicle or cites the offender for another infraction. Primary safety belt laws are much more effective in increasing safety belt use because people are more likely to buckle up when there is the perceived risk of receiving a citation for not doing so.

Seat belt use continues to be higher in the states in which vehicle occupants can be pulled over solely for not using seat belts (“primary law states”), as compared with the states with weaker enforcement laws (“secondary law states”) or without seat belt laws. Some people obey seat belt laws because it is the law, while others do so because they do not want to pay a penalty.

Enforcement of safety belt laws is significantly effective when it is combined with media saturation because the perceived risk of receiving a citation is increased. Research shows that people buckle up if they believe the police are enforcing the law. Laws improve seatbelt use but by themselves have been insufficient. The best method for increasing seat belt use has been intensive, short-term, highly publicized seat belt

enforcement campaigns.¹⁰³ Publicity alone or enforcement alone is inadequate; the combination of the two is needed.

C. METRICS / IMPACTS

The National Occupant Protection Use Survey (NOPUS) is the only nationwide probability based observational survey of seat belt use in the United States. The NOPUS is conducted annually by the National Center for Statistics and Analysis of the National Highway Traffic Safety Administration (NHTSA). The survey observes seat belt use as it actually occurs at randomly selected roadway sites.¹⁰⁴ The survey data is collected by sending trained observers to probabilistically sampled roadways across the country, and passenger vehicles only are observed during daylight hours.

Starting in 1994, the data shows a steady increase in daytime seat belt use overall across the country, increasing from 58 percent in 1994 to an all-time high of 86 percent in 2012.¹⁰⁵ Seat belt use continues to be higher in “primary law states” versus states with weaker enforcement laws (“secondary law states”). For primary law states, the 2012 percentage of observed seatbelt use was 90 percent as opposed to 78 percent in states without a primary seat belt law of some type.

In addition to the observational surveys, telephone surveys were conducted nationwide, before and after the May mobilizations in 2003, 2004, and 2007. Data from these surveys was utilized to examine trends in attitudes and awareness of seatbelt safety. Self-reported belt-use data showed an increase over time, along with an increasing belief in the safety aspects of seat belts.

¹⁰³ Ibid., 2.

¹⁰⁴ National Highway Traffic Safety Administration, *Traffic Safety Facts*, 2.

¹⁰⁵ Ibid., 1.

D. DISCUSSION

The Click It or Ticket seat belt campaign has been very effective in the United States. According to the National Highway Traffic Safety Administration, this campaign is the most successful seat belt enforcement campaign ever, helping create the highest national seat belt usage rate of 86 percent in 2012.¹⁰⁶

What characteristics of the Click It or Ticket model have made it successful in increasing the use of seat belts in the United States? First, it is required by law. Whether a primary or secondary law, state statutes regarding seat belt usage clearly have led more people to wear seat belts in vehicles. Second, a national campaign, involving a broad group of stakeholder groups, have partnered with the NHTSA in this effort. This has included engaging community organizations, local and state governments, and the federal government, as well as utilizing the media to saturate the public with the message, with primary implementation occurring at the state and local levels. Third, the campaign has had a significant focus on teens, and thus, has been messaged in the school systems repetitively. By instilling this message in our nation's youth, one can conclude the same message may also be taken home to the adults in the households, ultimately leading to increased seat belt usage among most age groups. Specific data broken down by age groups would be helpful in further evaluating the effects of these targeted campaigns in our school systems.

It should be noted that compliance with seat belt laws and increased seat belt use is clearly linked to individual perceived risk. In this case, the risk of receiving a citation for not wearing one's seat belt leads to increased seat belt use. However, questions still remain. Are people buckling up more simply for fear of receiving a ticket or is the internalization that of the safety aspects of wearing a seatbelt also a factor? The data suggest that in addition to increases seatbelt use due to avoidance of financial penalties, attitudes toward seatbelt use have also become increasingly positive over time. This can be attributed to a number of factors, but a key reason has been repetitive media exposure

¹⁰⁶ Ibid.

(television, radio and billboards) to and familiarity with traffic safety slogans such as Click It or Ticket.

While there are currently no specific laws in the United States requiring individuals or families to maintain any level of preparedness for disasters or other emergencies, there are models, methods, and messaging associated with seat belt safety that can perhaps be applied by the homeland security discipline to motivate individuals to engage in preparedness activities, increasing citizen preparedness in the United States.

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IV. CASE STUDY AND COMPARATIVE ANALYSIS: INDIVIDUAL AND COMMUNITY PREPAREDNESS IN THE UNITED KINGDOM

The final case examined is individual and community preparedness in the United Kingdom (UK). This chapter provides a comparative analysis of the legislative basis, policies, programs, and methods utilized by the UK in the area of individual/community preparedness and citizen engagement to prepare for terrorism and other emergencies. Presented first is background on the existing threats and hazards in the United Kingdom. This is followed by a theories / principals section in which the legislation governing the UK's vision and homeland security enterprise, as well as its approach to citizen engagement is explained and explored. The chapter concludes with an analytical comparison of the UK's and United States' approaches to individual and community preparedness.

A. BACKGROUND / HISTORY

The United Kingdom is subject to similar threats as those in the United States, such as natural hazards, potential health emergencies such as pandemic influenza or foot and mouth disease, and terrorism. This chapter presents a comparative analysis of the legislative basis, policies, programs, and methods utilized by the United Kingdom in the area of individual/community preparedness and citizen engagement in preparedness for terrorism and other emergencies with the intent of identifying practices that could perhaps be applied to citizen engagement in the United States.

Terrorism is not new to the United Kingdom. Between 1969 and the signing of the Belfast agreement in April 1998, more than 3,500 people died in the UK as a result of Irish-related terrorism.¹⁰⁷ Since then, there have been attacks by dissident republican terrorist groups to show their continued intent to commit such acts despite the political progress of recent years, which is supported by the overwhelming majority of people in

¹⁰⁷ HM Government, *The United Kingdom's Strategy for Countering International Terrorism*, 2009, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/228644/7547.pdf, 23.

Northern Ireland. In spite of this, it is international terrorism that remains the greatest current threat, both in UK and its overseas interests.

The principal current terrorist threat is from radicalized Islamic terrorism. The current threat is serious and sustained, and not likely to diminish significantly for several years.¹⁰⁸ On July 7, 2005 British terrorists attacked the London transport system, killing 52 people and injuring hundreds more.¹⁰⁹ A second planned attack two weeks later failed. Those involved in these operations were working with Al Qaida. There have been numerous plots against UK citizens since, including in London and Glasgow in June 2007 and Exeter in May 2008. Just as in the United States, the UK is also subject to other transnational threats, such as: organized crime; potential health emergencies, such as pandemic influenza or foot and mouth disease; natural hazards; and espionage.

B. THEORIES / PRINCIPLES

The vision of national security by the UK is to protect the UK and its interests in order to enable its people to go about their lives freely and with confidence. Their approach to national security is rooted in its stated core values. These include human rights, the rule of law, legitimate and accountable government, justice, freedom, tolerance and opportunity for freedom.¹¹⁰

During 2004, the intentions of the UK government became clear. It mapped out and implemented a legislative and capacity building program under the banner of UK Resilience.¹¹¹ The Civil Contingencies Secretariat defined resilience as, “The ability at every level to detect, prevent, prepare for and if necessary handle and recover from disruptive challenges.”¹¹² The UK government then went about making significant

¹⁰⁸ Prime Minister, *Countering International Terrorism: The United Kingdom's Strategy* (London: HM Government, 2006).

¹⁰⁹ HM Government, *The United Kingdom's Strategy for Countering International Terrorism*, 30.

¹¹⁰ Prime Minister, *The National Security Strategy of the United Kingdom: Update 2009* (London: Cabinet Office, 2009).

¹¹¹ Cabinet Office, *The Role of Local Resilience Forums: A Reference Document*, 2013, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/62277/The_role_of_Local_Resilience_Forum-A_reference_document_v2_July_2013.pdf, 1–15.

¹¹² Ibid.

structural changes to civil protection, bringing the legislative framework up to date, introducing new duties and codifying what already happens into practice. The Civil Contingency Act of 2004, and accompanying regulations and non-legislative measures provides a single framework for civil protection in the UK. The act is separated into two substantive parts:

- Part 1: focuses on local arrangements for civil protection, establishing a statutory framework of roles and responsibilities for local responders.¹¹³
- Part 2: focuses on emergency powers, establishing a modern framework for the use of special legislative measures that might be necessary to deal with the effects of the most serious emergencies.¹¹⁴

Within Part 1 are requirements for local responders to put arrangements in place to make information available to the public about civil protection, as well as arrangements to warn, inform and advise the public in the event of an emergency.

The changes to the legislative base of civil protection were wholesale. The 2004 Civil Contingencies Act cleared outdated legislation, redefined emergencies, clearly identified the roles of all participating organizations, introduced a mandatory structure for responders and replaced the previously outdated system for emergency powers. One of the key changes was the approach to risk. The 2004 act required the development of a Community Risk Register, which is available for public scrutiny. The government recognized that involving the public in prioritizing risks as crucial to the acceptance of these risks and involvement in mitigating these risks, leading to increased resiliency.

The Civil Contingencies Secretariat (CCS) sits within the Cabinet Office of UK Resilience in the UK central government. It works in partnership with government departments and key stakeholders to enhance the UK's ability to prepare for, respond to, and recover from emergencies. Its primary goals are:

- to make sure that the government can continue to function and deliver public services during a crisis;

¹¹³ Cabinet Office, "Civil Contingencies Act of 2004," November 2004, <http://www.ifrc.org/Docs/idrl/782EN.pdf>, 1.

¹¹⁴ Ibid., 14.

- to work with departments and the wider Cabinet Office to make sure that plans and systems are in place and cover the full range of potential disruption;
- to lead the delivery of improved resilience across the government and the public sector;
- to support ministers in developing policy;
- to identify and respond to potential and imminent disruptive challenges to the domestic UK;
- to build partnerships with other organization and countries to develop and share best practices in civil protection and knowledge of the UK's critical networks and infrastructure;
- to improve the capability of all levels of government, the wider public sector and the private and voluntary sectors to prepare for, respond to, and manage potential challenges.¹¹⁵

C. DISCUSSION

The United Kingdom's approach to the kinds of messages utilized to encourage individual and community preparedness is not significantly different from that of the United States. Literature abounds that provides information on threat and hazard awareness, and logical steps that individuals can take to mitigate those hazards, or at least prepare themselves and their families to be more self-sufficient and resilient when such events occur. Examples of such literature include: creating emergency supply kits, making family emergency plans, and different types of emergencies and appropriate responses.

In 2004 the UK government published a booklet providing general advice for a range of emergencies. "Preparing for Emergencies—What You Need to Know"¹¹⁶ was delivered to over 25 million households throughout the UK. The intention of the booklet was to ensure people across the UK have practical, common sense information about how to prepare for and what to do in the event of an emergency. Similar to the "If You See

¹¹⁵ Cabinet Office. "Improving the UK's Ability to Absorb, Respond to and Recover from Emergencies," 2013, <https://www.gov.uk/government/policies/improving-the-uks-ability-to-absorb-respond-to-and-recover-from-emergencies>, 1–3.

¹¹⁶ HM Government, *The Preparing for Emergencies Booklet*, 2004, http://www.direct.gov.uk/en/Governmentcitizensandrights/Dealingwithemergencies/Preparingforemergencies/DG_176035.

Something, Say Something” initiative recently launched nationwide in the USA, the UK stresses to members of its public that they can help prevent terrorism by being alert to possible suspicious activities and to report any suspicious activities to local law enforcement.

A key difference between the levels of preparedness of individuals in the UK versus the U.S. is the mentality of the public regarding terrorist attacks. As discussed previously, terrorist acts and attempted acts have occurred on United Kingdom soil for many years. Thus, British citizens are keenly aware that such attacks can and most likely will continue to occur in their communities, especially in the urban areas. They are especially cognizant of this fact as it relates to increased domestic Islamic radicalization in their country.

This history of violent terrorist acts (other than those that occurred on September 11, 2001 and more recently Boston Marathon bombings in April 2013) does not exist in the United States. Thus, the same mentality and awareness does not exist in the majority of the United States.

Recent terrorist threat assessment data suggests Al-Qaeda and allied groups continue to pose a threat to the United States. Although it is less severe than the catastrophic proportions of a 9/11 type attack, the threat today is more complex and diverse than at any time over the past nine years.¹¹⁷ The data also reflects growth of homegrown threats.

While the analysis of the approach to citizen engagement in the United Kingdom leads to the conclusion that it is not dramatically different that the overall approach in the United States, there are some differences that the U.S. could perhaps learn from and thus should explore more fully. For example, the UK places a heavy emphasis on defining the roles of all participating organizations with regard to civil protection, to the point of a legislatively mandated structure for responders. While the democratic form of government based on state sovereignty and local control would make that change difficult

¹¹⁷ Peter Bergen and Bruce Hoffman, *Assessing the Terrorist Threat: A Report of the Bipartisan Policy Center's National Security Preparedness Group* (Washington, DC: Bipartisan Policy Center, 2010).

at best in the United States, the premise of placing the primary responsibility squarely on the shoulders of local governments and local officials is something that may merit further consideration. In other words, perhaps the federal government in the United States is trying to do too much, or is expected to do too much, as related to individual and community preparedness.

Another area that may be worthy of more detailed examination is engagement of the public in identifying and prioritizing risks. The UK's Community Risk Register, as mandated by its 2004 Civil Contingencies Act, has significant public involvement, which it can be argued, leads to greater public acknowledgement and acceptance of those risks. This ultimately results in more public willingness to mitigate them (i.e., preparedness and resilience). While neither of the aforementioned issues present solutions that can be immediately implemented in the United States, they are ideas that can be considered and at a minimum, realistically woven into our strategies on citizen engagement.

V. RECOMMENDATIONS AND CONCLUSIONS

A. RECOMMENDATIONS

1. Defining Preparedness

Defining “preparedness” and developing metrics for measuring our level of “preparedness” as it relates to emergency management and homeland security has eluded us for over a decade. What we are coming to realize is that it is more than just stating how much money was spent or what was purchased. It is about quantifying a desired outcome and then measuring against the achievement of that outcome. Although there is an ongoing conversation about what “success” in preparedness looks like, one of the deliverables of *Presidential Policy Directive 8: National Preparedness (PPD-8)*, the *National Preparedness Goal*, defines success as: “A secure and resilient Nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk.”¹¹⁸ The goal goes on to state that individual and community preparedness is fundamental to achieving success. It discusses the need to provide the necessary knowledge and skills to enable all segments of our communities to contribute to and benefit from national preparedness.

In the case of fire safety and fire prevention programs, success is primarily demonstrated by NFPA survey data showing steady improvement over time, essentially a steady decline in fires and civilian fire deaths over time. But whether such a decline is directly attributable to the fire prevention and fire safety campaigns remains somewhat unclear. Should we be content with a steady decline and call that success or should a target metric, a desired number of percentage be determined as a goal, and success is not achieved until that metric is reached?

The same thought process can be applied to seat belt safety programs. Success or effectiveness is primarily measured by the level of seat belt usage. However, it is unclear if such usage levels are primarily due to the users’ belief in the safety aspects of seat belts

¹¹⁸ U.S. Department of Homeland Security, *National Preparedness Goal*, 1.

or if the increased usage is primarily due to a desire to avoid the penalties resulting from receipt of a citation for not wearing a seat belt. Again, a clearly defined and identified metric seems to be lacking.

When comparing the United Kingdom to the United States, the respective definitions of preparedness and resilience, while similar, are not consistent. But perhaps they should not be, as the citizenry in the UK may have a different mentality regarding terrorism and preparedness than Americans do. Since the UK has suffered from terrorist attacks for a much longer time and at a higher frequency than the United States, the public may have a higher level of acceptance or acknowledgement that terrorism is a legitimate threat to their daily lives, whereas that same level of acceptance and the likelihood of attack does not exist in the United States.

Similarly, there is still a great deal of ambiguity as to how preparedness and resilience specifically translate to citizen engagement. It does lead us towards desired outcomes of increased survivability following catastrophic events, self-sufficiency and empowerment with collective responsibility to be less reliant on our system of first responders, and an ability to bounce back quickly following an event. Programs and initiatives that support this course of action should be continued and improved, while those that do not should be abandoned, allowing us to focus resources on those that do.

While this is a positive step in determining our desired course of action regarding citizen engagement, dialogue should continue as to how to successfully implement this cultural change at the individual level. The dialogue must include all relevant stakeholder groups to ensure maximum engagement in achieving a state of preparedness and readiness, where preparedness becomes part of our individual day-to-day routines, truly enabling individuals to collectively create a more resilient nation.

2. Increased Emphasis on Psychological Requirement for Behavioral Change

In looking at citizen engagement in preparedness, there is a need to more fully consider the psychological and social aspects of frameworks for how individuals move through a behavior change process. That is, how people receive information about

emergency risks, perceive those risks, and behave in relation to the risks. More emphasis should be placed on the psychological requirements for behavioral change and what drives individuals to take action. As it relates to preparedness, there should be an increased focus on what moves individuals through the stages of change model (pre-contemplation, contemplation, preparation, action, maintenance and relapse prevention). This information should focus on the implementation of initiatives, programs and messages that will motivate an individual to move from contemplation of preparedness actions to actually taking an action.

Chapter III on seat belt safety supports the linkage of preparedness actions to perceived risk. Jurisdictions with primary seat belt laws are more effective in increasing seat belt use because of the perceived risk of receiving a citation. Thus, seat belt compliance is tied to perceived risk. The psychological requirement for behavioral change is also evident in Chapter IV of the thesis on the United Kingdom. The UK utilizes a community risk register, in which it prioritizes risk. The registry is available for the public to review and scrutinize, so there is awareness and involvement of the citizenry in determining the sources and levels of risk. The UK government believes this public engagement is significant to the acceptance of the risks, subsequently leading to public involvement in mitigating those risks, resulting in increased resiliency.

We must take into account threat messaging and risk messaging, and how individuals interpret, perceive and respond to these messages. Expertise in academia, psychology, and social science should be aggressively sought out and consistently engaged to enable the homeland security discipline to fully understand what initiates and sustains behavioral change. Armed with this knowledge, homeland security practitioners should be able to more effectively engage citizens in preparedness. Additionally, further research specific to behavioral change related to preparedness actions may be warranted.

3. Messages and Messengers

As a nation, in the homeland security discipline, we have had limited success in getting individuals and the general public to engage in preparedness activities. We have attempted the same tactics over and over again and seem to be stuck in a repeating pattern

of inaction. Years of survey data support this statement. Alternative threat and risk messaging may be needed to effectively communicate to the public in such a way as to invite, encourage and motivate people to move beyond awareness and acceptance, and to take action. Perhaps we need to streamline the preparedness messages to the public, simplifying the message to clearly state the desired actions or outcomes. The messages must be changed into words that people understand and cause them to take action.

As recently as September 2013, at the kick-off of the tenth annual National Preparedness Month in New York City, FEMA administrator Craig Fugate said, “We are overloading everybody with information. Being prepared is more about a state of mind than a stack of supplies.”¹¹⁹

The importance of both the messages and the messengers is substantiated in all three cases previously discussed in this thesis. The chapter on fire safety/fire prevention explains the importance of keeping the public informed about the importance of fire prevention. Each year, Fire Prevention Week focusses on one particular aspect of fire prevention or safety, with messages that are simple, with a clearly defined desired course of action. Often these messages are delivered with the assistance of the private sector, celebrities, and local public officials. The target audience of these messages and activities is predominately youth, particularly preschool through fifth grade. The media is partnered with extensively to deliver messages repetitively.

There are similarities in the case on seat belt safety. Media saturation is utilized for intensive, short-term seat belt enforcement campaigns. As with fire prevention, the campaigns have been national with a broad group of stakeholders, but again, they are implemented at the state and local levels. Furthermore, there is a focus on youth, primarily teens, which lends itself well to repetitive messaging in the school systems.

The case study on the United Kingdom also demonstrated a heavy focus on preparedness messaging. The UK governments produces and disseminates literature that

¹¹⁹ Federal Emergency Management Agency, “FEMA, New York City Office of Emergency Management, and The Ad Council Kick Off 10th Annual National Preparedness Month,” September 4, 2013, <http://www.fema.gov/news-release/2013/09/04/fema-new-york-city-office-emergency-management-ad-council-kick-10th-annual>.

provides information on threats and hazards, as well as logical steps citizens can take to mitigate the hazards and/or prepare themselves and their families to be more resilient if such events occur.

We must take into account threat messaging and risk messaging, and how individuals interpret, perceive and respond to these messages. As part of this process, expertise in academia, psychology and social science, and industry must be better utilized to improve effectiveness. Data supports the claim that a preparedness strategy that focuses on fear will be ineffective, especially with the youth population. The topic should be moved from the extreme scenarios and into everyday conversations of the intended audiences and be made relative to the actual risks they face in their respective communities. Messages should be promoted which present more realistic information about risk.

The federal government should continue to lead an effort to seek additional expertise in the development of the aforementioned messages. The marketing industry in the private sector, as well as academia, based on proven clinical findings, should be challenged to find more effective ways to frame preparedness messages and warnings in ways the general public can understand them.

There is a clear correlation to message acceptance and willingness to act as related to the source of the information. Accordingly, messages should be delivered by credible and trusted sources if they are to be acted upon by our citizens. Local officials, uniformed officials, and medical personnel appear to be the most trusted and credible deliverers of information, in terms of effectiveness and action. Thus, more focus should be placed on whom delivers preparedness messages.

We should target those segments of society that are determined to be the most likely to prepare if provided the motivation, knowledge, and tools to do so. Leading educators and scholars in the field of preparedness consider our nation's youth to be the best conduit for taking preparedness messages home to their families.

The 2012 *National Preparedness Report* states the FEMA's 2011 Household Preparedness Survey indicated that households with children who brought home

preparedness materials were significantly more likely to be prepared than other households. For example, 70 percent of households with children bringing home preparedness materials said they have an emergency plan that family members have discussed, compared to about 40 percent of other households.¹²⁰

A focus on youth preparedness education at multiple levels should continue, and be increased if possible. The feasibility of implementation of a preparedness curriculum in the school system should be researched further, acknowledging limitations on available classroom time and financial resources, as well as state educational requirements. Government at all levels, along with organizations such as the American Red Cross, as well as private sector, non-profit, faith-based, and community-based organizations, should continue to partner and increase collaboration to facilitate enhanced empowerment of youth to increase the resiliency of our nation through preparedness education.

Homeland security stakeholders need to deliver preparedness messaging in alternative ways to the general public to motivate individuals to engage in preparedness activities, based on clinically tested psychological, emotional and behavioral strategies. This course of action could dramatically increase citizen preparedness in the United States.

4. Community-Based Implementation

This thesis supports the claim that effective models (e.g., fire prevention and fire safety, and seat belt safety) are community-based. They are bottom-up focused versus top-down. Local communities play a major role in terms of providing support for and encouraging participation in training and education programs, raising overall awareness of the importance of preparedness, both on the individual and collective community levels. Thus, it is important that whole communities become involved in terms of preparing citizens for potential disasters and creating a sense of security among all individuals in a community.

¹²⁰ U.S. Department of Homeland Security, *National Preparedness Report 2012*, 27.

The chapter on fire safety/fire prevention describes how messages and programs are primarily implemented at the local level. Similarly, seat belt safety programs are most effective when implemented with the involvement of community organizations, in cooperation with local and state law enforcement. Chapter IV on the United Kingdom follows suit by explaining that one of the two parts of UK's Civil Contingency Act of 2004, which focusses on civil protection at the local level and establishes roles and responsibilities for local responders. All three cases presented demonstrate increased program effectiveness when implemented at the local community level.

Thus, it can be argued that entire communities must engage in preparedness activities through community-based interaction and planning to increase the community's ability to adapt to emergency incidents. Empowering communities to be more resilient to natural and man-made hazards will lessen the expectation of initial federal government response and reduce costs. In times of crisis, our nation must be prepared to respond in ways that lie outside the routine paradigms in which we traditionally operate. The health, safety, and security of our citizens may be at significant risk without swift and aggressive intervention and assistance. Time is of critical importance, and the requirement for action begins within communities where people live and work, where businesses and industries operate, and where local governments and government institutions reside.

The federal government should increase its efforts to foster a national approach to emergency management that is built upon a foundation of proactive engagement with broad and diversified groups of community stakeholders, which include schools, faith-based groups, businesses, neighborhood associations, trade groups, and fraternal and other civic-minded organizations. These stakeholders can mobilize their networks to build community resilience and support local needs in times of catastrophe and should not wait on the federal government to provide post-event assistance. Certainly, the magnitude of event may result in supportive federal assistance and resources, but the perceived or real expectation of immediate or near-immediate federal assistance must be reduced.

While emergency management, public health, security, law enforcement, critical infrastructure, medical organizations, and other homeland security disciplines already

possess the legislative authorities, policies, and doctrine to step into and execute assigned roles and responsibilities immediately, we need the imagination and creativity to institute a new level of inclusive and participatory planning and preparedness that engages all segments of the community. This means moving away from a mindset that government is always in the lead, to a mindset that builds upon the strengths of our local communities and, more importantly, our citizens, individually and collectively. It also means planning for communities as they are, not applying a cookie-cutter image of what we might like them to be. How effective we all are as a team in the first 72–96 hours following the onset of a disaster, whether a man-made or natural event, will largely dictate how successful we are in saving lives, stabilizing the community, and then supporting its timely recovery and return to some degree of normalcy.

This approach should be outcomes-based and grounded in results, not processes. Furthermore, results should be defined by measureable objectives and tasks. In addition, standards should be set that are aligned with outcomes and evaluated by metrics.

To be effective, the approach must focus on the individual and the community, not the incident or processes. We must stop considering individuals and communities as liabilities, but as key assets in homeland security. Our citizens are force multipliers, who offer specialized knowledge and skills, provide neighbor-to-neighbor assistance, and allow emergency responders to focus on caring for the most vulnerable members of society. That begins with personal and family preparedness, which is, and will remain, a national priority. Nothing will contribute more to saving and sustaining lives than a prepared citizen that is equipped to reduce their exposure to harm, or when harm cannot be avoided, can function effectively in the days immediately following a catastrophic disaster to take care of themselves and their neighbors. Every family that takes even the most basic preparedness actions, such as having a disaster kit and a minimal supply of food and water, frees responders and critical resources to provide for those who truly need such assistance. Partnerships that demonstrate this reality are a fundamental requirement to maximizing our combined strengths, achieving resilience, and having the resolve and capacity to quickly reach those community members that are most in need of assistance.

The environment of each community must be explored and evaluated with its own citizens as fully engaged partners, to understand how that particular community functions and addresses issues. Although common characteristics exist in most communities, acknowledging that each community is unique, and thus preparedness programs must be adaptable to the specific community is critical. Challenges specific to the community must be recognized, as well as community specific opportunities.

A *Whole Community* approach to emergency management was formally introduced by FEMA in December 2011.¹²¹ FEMA desired to lay the foundation for this new approach and to start a national dialog on this new philosophical approach in how to conduct emergency management.¹²²

When developing an implementation strategy for this whole community approach to community engagement, it is important to recognize what the critical elements of community engagement are. Some of the key themes already identified are:

- understand community complexity;
- recognize community capabilities and needs;
- foster relationships with community leaders;
- build and maintain partnerships;
- empower local action; and
- leverage and strengthen social infrastructure, networks, and assets.¹²³

Additional outreach to various community stakeholders groups should be conducted to further refine the required elements of effective community engagement, as well as identifying the most successful ways to interact with these stakeholder groups at the community level.

Based on the premise that engaging more successfully at the community level will yield more favorable citizen engagement results, additional engagement and planning is

¹²¹ Federal Emergency Management Agency, *A Whole Community Approach to Emergency Management: Principles, Themes, and Pathways for Action* (FDOC 104-008-1), 2011, http://www.fema.gov/media-library-data/20130726-1813-25045-0649/whole_community_dec2011__2_.pdf, 2.

¹²² *Ibid.*, 3.

¹²³ *Ibid.*, 5.

also needed within the internal federal government environment. For the past several years, the phrase “create of culture of preparedness” has been utilized extensively. To create such a culture at the individual and community level, a cultural change is first required at the federal government level with regard to the approach in achieving this objective.

Not only must this new strategy be socialized within the FEMA component of the U.S. Department of Homeland Security (DHS) but also within the DHS as a whole. Strategists must recognize the need for change and be motivated to implement the desired changes. Subsequently, an executable implementation plan for realizing the objective must be developed. As part of the process, the internal organization, in this case, FEMA must identify its own internal strengths and weaknesses with regard to community preparedness programs. Weaknesses should be mitigated to the extent possible while leveraging strengths.

Concurrently, the reach must also be extended to the larger federal interagency. Other federal agencies can and should be productively engaged in this new approach as active partners and the resources of other agencies and their programs should be leveraged at the community level to not only maximize potential results, but also to ensure we are not in conflict with each other, and to minimize duplication of resources.

The other key step in the planning process for this new strategy is the implementation process. How will this new approach be implemented? Based on the DHS / FEMA mission(s), are corresponding resources being applied to this stated individual and community preparedness priority? If not, an effective strategy will need to be developed and implemented to gain the support of key stakeholders, including the U.S. Congress and the federal interagency, to more appropriately apply existing resources.

Additionally, an internal engagement strategy must be developed and implemented to make this a priority of the entire organization, not just the Community Preparedness Division and the Protection and National Preparedness Directorate. To be effective, this new approach must transcend across the entire organization with a shared

responsibility for the whole community approach across programmatic areas within the regional FEMA offices.

Under the Obama administration, FEMA Administrator W. Craig Fugate brought to FEMA a new focus, which directs that all sectors and all levels of a community must be effectively integrated, resourced, and mobilized to achieve the FEMA mission. FEMA is only one member of the team; it is only one piece of the homeland security enterprise. The whole community approach supports the desired cultural shift, or mind-set, of community-based personal and individual responsibility with regard to individual, family, and community preparedness. It redirects the preparedness focus towards enhanced personal preparedness through the community and, ultimately, through each individual.

This whole community approach is a means by which residents, homeland security practitioners, organizational and community leaders, and government officials can collectively understand and assess the needs of their respective communities and determine the most effective ways to organize and strengthen their assets, capacities, and interests. Many communities have used this approach effectively for years, while for other communities it is a new concept. While there are many similarities that most communities share, communities are ultimately complex and unique. Ideas that work well in one particular community may not be feasible in another due to local regulations, available funding, demographics, geography, or community culture.

As stated previously in this chapter, whole community is a philosophical approach in how to conduct the business of emergency management and homeland security. As a nation, we should continue to capitalize on the FEMA whole community approach to emergency planning and preparedness and take it to next level by pursuing the actions previously recommended in this section. This approach provides a foundation for increasing individual preparedness and engaging with members of the community as vital partners in enhancing resiliency.

B. CONCLUSIONS

The homeland security landscape has changed significantly since the events of September 11, 2001. Just as the portfolio of threats and hazards in the United States have evolved over the last 12 years, the economic realities and associated budgetary constraints in our current environment necessitate the need for prudent use of our limited financial resources. However, one thing has remained constant: the need for active citizen engagement remains a vital component to our linked homeland security and national security strategies. Individuals must be more engaged in homeland security issues for this nation to create an effective and enduring culture of preparedness and resilience.

Imagine a largely decentralized organization in which a core foundational principle is the existence of trusting relationships across a broad group of stakeholders. Next, imagine this same organization being willing to step outside of the box and put forth a new product and an innovative delivery of that product to its customers.

Achieving success in today's environment, with the many challenges and obstacles present, requires innovative approaches to strategic planning and implementation. Whether the intent is to run a profitable business, a successful non-profit organization, or to implement effective strategies, policies and programs across all levels of government, the private sector and in our communities to protect our homeland against terrorism and catastrophic natural disaster, the recommendations presented in this thesis provide a creative but feasible framework for success. If combined and implemented in an integrated and comprehensive manner, the potential for success could be dramatically increased. Although a significant departure from traditional methods and practices, this new more decentralized approach that is based on a strong foundation of trusting relationships, is within the realm of realistic possibilities.

This approach would leverage existing organizations at the community level to engage more fully in preparedness activities. A whole community approach to preparedness and citizen engagement primarily implemented at the community level, if adopted and successfully implemented, could significantly improve the level of

preparedness of individual citizens and their communities, and collectively transform our county into a more resilient nation.

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LIST OF REFERENCES

- Bach, Robert, and David Kaufman. "A Social Infrastructure for Hometown Security: Advancing the Homeland Security Paradigm, *Homeland Security Affairs* V (2009). <http://www.hsaj.org/?fullarticle=5.2.2>.
- Bandura, Albert. "Self-efficacy: Toward a Unifying Theory of Behavior Change." *Psychological Review* 84 (1977): 191–215.
- Bergen, Peter, and Bruce Hoffman. *Assessing the Terrorist Threat: A Report of the Bipartisan Policy Center's National Security Preparedness Group*. Washington, DC: Bipartisan Policy Center, 2010.
- Bonger, Bruce, Lisa M. Brown, Larry E. Beutler, James N. Breckenridge, and Philip G. Zimbardo. *Psychology of Terrorism*. New York: Oxford University Press, 2007.
- Broughton, Pam. "Measuring Preparedness: Assessing the Impact of the Homeland Security Grant Program." Master's thesis, Naval Postgraduate School, Monterey, CA, 2009.
- Bylsma, Jessica. "Unacceptable Gaps: Community Grassroots Involvement in Homeland Security." Naval Postgraduate School. 2010.
<https://www.hsdl.org/?view&did=696051>.
- Cabinet Office. *The Role of Local Resilience Forums: A Reference Document*. 2013.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/62277/The_role_of_Local_Resilience_Forums-_A_reference_document_v2_July_2013.pdf.
- Campasano, Nick. "Community Preparedness: Creating a Model for Change." Master's thesis, Naval Postgraduate School, Monterey, CA.
- Cochran, William. *Sampling Techniques*. New York: Wiley and Sons, 1953.
- Cooperider, David L. and Diana Whitney. "Appreciative Inquiry: A Positive Revolution in Change." In *The Change Handbook*, edited by Peggy Holman and Tom. Devane, 245–263. San Francisco, CA: Berrett-Koehler Publishers.
- Conroy, AnneMarie. "What is Going to Move the Needle on Citizen Preparedness? Can America Create a Culture of Preparedness?" Master's thesis, Naval Postgraduate School, Monterey, CA.
- Emergency Management. "Craig Fugate Discusses How FEMA Has Changed (And What's Next)." May 28, 2013. <http://www.emergencymgmt.com/disaster/Craig-Fugate-FEMA-QA-2013.html>.

- . “The Preparedness Message Isn’t Reaching the Public.” November 12, 2012. <http://www.emergencymgmt.com/disaster/Preparedness-Message-Isnt-Reaching-Public.html>.
- Enders, Jessica. *Measuring Community Awareness and Preparedness for Emergencies*. Australian Journal of Emergency Management 16, no. 3 (2001): 52–58.
- Ewing, George. “The Department of Homeland Security Initiative for Community Empowerment and Security: A Community-Based Approach to Homeland Security.” Naval Postgraduate School. 2009. <https://www.hsdl.org/?view&did=696047>.
- Federal Emergency Management Agency. “Citizen Corps Personal Behavior Change Model for Disaster Preparedness.” *Citizen Preparedness Review* no. 4 (Fall 2006). http://www.citizencorps.fema.gov/downloads/pdf/ready/citizen_prep_review_issue_4.pdf.
- . “FEMA Announces 2012 Community Resilience Innovation Challenge.” News release. September 27, 2012. <http://www.fema.gov/news-release/2012/09/27/fema-announces-2012-community-resilience-innovation-challenge-1>.
- . “New Grassroots Campaign to Increase Community Preparedness.” News release. September 5, 2013. <http://www.fema.gov/news-release/2013/09/05/new-grassroots-campaign-increase-community-preparedness>.
- . *Personal Preparedness in America: Findings from the 2012 FEMA National Survey*. Washington, DC: U.S. Department of Homeland Security, 2013.
- . *A Whole Community Approach to Emergency Management: Principles, Themes, and Pathways for Action* (FDOC 104–008-1). 2011. http://www.fema.gov/media-library-data/20130726-1813-25045-0649/whole_community_dec2011__2_.pdf.
- Flynn, Mary Theresa. “Involving Citizens in Homeland Security: Changing the National Culture and Assumed Safety.” Naval Postgraduate School. 2010. <http://www.chds.us/?essay/overview>.
- Ford, Christopher. “Twitter, Facebook, and Ten Red Balloons: Social Network Problem Solving and Homeland Security.” Naval Postgraduate School. 2010. <http://www.chds.us/?essay/overview>.
- Gladwell, Malcolm. *The Tipping Point: How Little Things Can Make a Big Difference*. New York: Little, Brown and Company, 2000.
- Hammond, Sue Annis. *The Thin Book of Appreciative Inquiry*. 2nd ed. Plano, TX: Thin Book Publishing Company, 1998.

- Heath, Chip, and Dan Heath. *Made to Stick: Why Some Ideas Survive and Others Die*. New York: Random House, 2008.
- HM Government. *The Preparing for Emergencies Booklet*. 2004.
http://www.direct.gov.uk/en/Governmentcitizensandrights/Dealingwithemergencies/Preparingforemergencies/DG_176035.
- . *The United Kingdom's Strategy for Countering International Terrorism*. 2009.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/228644/7547.pdf.
- Homeland Security Council. *National Strategy for Homeland Security*. Washington, DC: Homeland Security Council, 2007.
- Lucas-McEwen, Valerie. "Why Aren't Disaster Preparedness Messages Sticky?" March 2013.
http://www.emergencymgmt.com/templates/gov_print_article?id=199763151.
- National Center for Disaster Preparedness. *The American Preparedness Project: Where the U.S. Stands in 2007 on Terrorism, Security and Disaster Preparedness*. Columbia, NY: Columbia University Mailman School of Public Health, 2007.
- National Highway Traffic Safety Administration. *Analyzing the First Years of Click It or Ticket Mobilizations* (DOT HS 811 232). Washington, DC: Department of Transportation, 2010.
- National Highway Traffic Safety Administration's National Center for Statistics and Analysis. *Traffic Safety Facts: Research Note* (DOT HS 811 691). Washington, DC: U.S. Department of Transportation.
- National Intelligence Council. *Global Trends 2025: A Transformed World*. Washington, DC: National Intelligence Council, 2008.
- Prime Minister. *Countering International Terrorism: The United Kingdom's Strategy*. London: HM Government, 2006.
- . *The National Security Strategy of the United Kingdom: Update 2009*. London: Cabinet Office, 2009.
- Reese, Shawn. *Defining Homeland Security: Analysis and Congressional Considerations*. Washington, DC: Congressional Research Service, 2013.
- Reissman, Dori B. Shauna Spencer, Terri L. Tanielian, and Braddley D. Stein. "Integrating Behavioral Aspects into Community Preparedness and Response Systems." *Journal of Aggression, Maltreatment & Trauma* 10, no.3–4 (2005): 707–720.

- U.S. Department of Homeland Security. *FEMA Strategic Plan: Fiscal Years 2011–2014*. Washington, DC: U.S. Department of Homeland Security, 2011.
- . *National Preparedness Goal*. Washington, DC: U.S. Department of Homeland Security, 2011.
- . *National Preparedness Guidelines*. Washington, DC: U.S. Department of Homeland Security, 2007.
- . *National Preparedness Report 2012*. Washington, DC: U.S. Department of Homeland Security, 2012.
- . *Quadrennial Homeland Security Review Report: A Strategic Framework for a Secure Homeland*. Washington, DC: U.S. Department of Homeland Security, 2010.
- . *Strategic Plan Fiscal Years 2012–2016*. Washington, DC: U.S. Department of Homeland Security, 2012.
- . *Target Capabilities List: A Companion to the National Preparedness Guidelines*. Washington, DC: U.S. Department of Homeland Security, 2007.
- U.S. Government Accountability Office. *Emergency Management: Preliminary Observations on FEMA’s Community Preparedness Programs Related to the National Preparedness System* (GAO-10-105T). Washington, DC: U.S. Government Accountability Office, 2009.
- Watson, Sharon. “Resilient Communication: A New Crisis Communication Strategy for Homeland Security.” Master’s thesis, Naval Postgraduate School, Monterey, CA.
- White House. *National Security Strategy*. Washington, DC: White House, 2010.
- Witte, Kim. “Putting the Fear Back into Fear Appeals: The Extended Parallel Process Model.” *Communication Monographs* 59 (December 1992): 329–349.
[achttps://www.msu.edu/~wittek/fearback.htm](https://www.msu.edu/~wittek/fearback.htm).
- Zimbardo, Philip, and John Boyd. *The Time Paradox: The New Psychology of Time That Will Change Your Life*. New York: Free Press, 2008.

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